Application No. 10/517,864 Response Dated: April 23, 2008

Reply to Notice of Non-Compliant Amendment dated March 25, 2008

Attorney Docket No. 4385-045796

AMENDMENT TO THE SPECIFICATION

At page 11, please replace the paragraph beginning with "According to the invention the amino resin moulding..." and ending with "...melt can be subjected to melt filtration before removal." with the following rewritten paragraph.

-- According to the invention the amino resin moulding materials are produced according to a process wherein mixtures which consist of meltable 20 to 1000 nuclei polytriazine ethers,

wherein in the polytriazine ethers the triazine segments

 R_1 = -NH₂, -NH-CHR₂-O-R₃,-NH-CHR₂-O-R₄-OH, -OH, phthalimido-. succinimido-, -NH-CHR₂-O-R₄-O-CHR₂-NH-, -NH-CHR₂-NH-, -NH-CHR₂-O-CHR₂-NH-,

 $R_2 = H, C_1-C_7 - alkyl;$

 $R_3 = C_1 - C_{18} - alkyl, H;$

 $R_4 = C_2 - C_{18} - \text{alkylene}, - \text{CH}(\text{CH}_3) - \text{CH}_2 - \text{O}_{-\text{C2-C12}} - \text{alkylene} - \text{O}_{-\text{CH}_2} - \text{CH}(\text{CH}_3) - \text{CH}_{-\text{CH}_3} - \text{CH}_{-\text{CH$

-CH(CH₃)-CH₂-O- $_{\text{C2-C12}}$ -arylene-O-CH₂-CH(CH₃)-,

 $CH_2-CH_2-]_n-,$

 $-[(CH_2)_{2-8}-O-CO-_{C6-C14}$ -arylene-CO- $O-(CH_2)_{2-8}-]_n$ -,

 $-[(CH_2)_{2-8}-O-CO-_{C2-C12}-alkylene-CO-O-(CH_2)_{2-8}-]_n$

wherein n = 1 to 200;

siloxane groups containing sequences of the type

$$\begin{array}{c|cccc} C_1\text{-}C_4\text{-}alkyl & C_1\text{-}C_4\text{-}alkyl \\ & & | & & | \\ & - & | & | \\ & - & | & | & | \\ & & C_1\text{-}C_18\text{-} & alkyl - O - Si - O - [Si-]_{1-4}\text{-} & O - & C_{1-C_18}\text{-} & alkyl - \\ & & & | & & | & \\ & & & C_1\text{-}C_4\text{-}alkyl & C_1\text{-}C_4\text{-}alkyl \end{array}$$

siloxane groups containing polyester sequences of the type -[(X)_r-O-CO-(Y)_s- $CO-O-(X)_r$]-,

wherein

- siloxane groups containing polyether sequences of the type

$$C_1\text{-}C_4\text{-}alkyl \qquad C_1\text{-}C_4\text{-}alkyl$$

$$\qquad \qquad | \qquad \qquad |$$

$$-\text{CH}_2\text{-}\text{CHR}_2\text{-}\text{O-}(\{\text{Si-O-}[\text{Si-O}]_y\text{-}\text{CHR}_2\text{-}\text{CH}_2\text{-}$$

$$\qquad \qquad | \qquad \qquad |$$

$$C_1\text{-}C_4\text{-}alkyl \qquad C_1\text{-}C_4\text{-}alkyl$$
 wherein R_2 = H; $C_1\text{-}C_4\text{-}alkyl \quad \text{and} \quad y$ = 3 to 50;

- sequences based on alkylene oxide adducts of melamine of the type 2-amino-4,6-di-_{C2-C4-}alkylene-amino-1,3,5-triazine sequences:

- phenolic ether sequences based on bivalent phenols and C₂-C₈ diols of the type -_{C2-C8}-alkylene-O-_{C6-C18}-arylene-O-_{C2-C8}-alkylene sequences;

are combined through bridging members -NH-CHR₂-O-R₄-O-CHR₂-NH- and -NH-CHR₂-NH- and optionally -NH-CHR₂-O-CHR₂-NH- to 20 to 1000 nuclei polytriazine ethers with linear and/or branched structure,

wherein in the polytriazine ethers the molar ratio of the substituents is $R_3: R_4 = 20: 1$ to 1: 20,

the proportion of the combinations of the triazine segments through bridging members - NH-CHR₃-O-R₄-O-CHR₃-NH- is 5 to 95 mol%,

and wherein the amino resin moulding materials can contain up to 75 mass% fillers, up to 50 mass% further reactive polymers of the type ethylene copolymers, maleic acid anhydride copolymers, modified maleic acid anhydride copolymers, poly(meth)acrylates, polyamides, polyesters and/or polyurethanes, up to 20 mass% diols of the type HO-R₄-OH and up to 2 mass% stabilisers, UV absorbers and/or auxiliary substances,

are produced according to a multi-step process wherein

- in the first step of the process precondensates of C₁-C₈-aldehydes and triazine derivatives of the structure

$$R_1$$
 C
 N
 N
 $R_5 - C$
 $C - R_5$

 $R_1 = -NH_2$, -NH-CHR₂-OH, -OH, phthalimido-. succinimido-, $R_2 = H$, C_1 - C_7 - alkyl;

 $R_5 = -NH-CHR_2-OH$

are etherified through conversion with C1-C8 alcohols in neutral to weak acid medium at 25 to 150°C and 0.1 to 5 bars and the substituted triazine derivatives are conditioned during standing times of 5 to 15 min at 150 to 250°C and 0.1 to 15 bars wherein salts formed can be separated off while maintaining a pH value of 7 to 10 in that the melt of the amino triazine ethers is dissolved at 70 to 150°C in 70 to 150 mass%, in relation to the amino triazine ethers, C₃ to C₆ alcohols, insoluble proportions are separated off after cooling to 15 to 40°C, and the added C₃ bis to C₆ alcohols are vaporised at 70 to 140°C to a remaining content of 5 to 20 mass%,

in the second step of the process the obtained C₁-C₈-alkyl-oxa-C₁-C₈-alkylene-aminosubstituted triazine derivatives, through partial transethification with diols of the type HO-R₄-OH and/or partial conversion with bisepoxides of the type

$$H_2C - CH - R_6 - CH - CH_2$$

O

O

wherein R4

siloxane groups containing sequences of the type

$$\begin{array}{c|cccc} C_1\text{-}C_4\text{-}alkyl & C_1\text{-}C_4\text{-}alkyl \\ & & | & | \\ - & & | & | \\ - & & | & | \\ C_1\text{-}C_{18}\text{-}alkyl - O - Si - O - [Si-]_{1-4}\text{-}O - {}_{C1\text{-}C_{18}}\text{-}alkyl - \\ & & | & | & | \\ C_1\text{-}C_4\text{-}alkyl & | & C_1\text{-}C_4\text{-}alkyl \\ \end{array}$$

siloxane groups containing polyester sequences of the type -[(X)_r-O-CO-(Y)_s- $CO-O-(X)_r$]-,

wherein

$$\begin{split} X &= \{ (CH_2)_{2-8} \text{-O-CO-}_{C6-C14} \text{-arylene-CO-O-}_{(CH_2)_{2-8}} \} \text{ or } \\ &- \{ (CH_2)_{2-8} \text{-O-CO-}_{C2-C12} \text{-alkylene-CO-O-}_{(CH_2)_{2-8}} \}; \end{split}$$

- siloxane groups containing polyether sequences of the type

$$\begin{array}{c|cc} C_1\text{-}C_4\text{-}alkyl & C_1\text{-}C_4\text{-}alkyl \\ & | & | \\ \text{-}CH_2\text{-}CHR_2\text{-}O\text{-}(\{Si\text{-}O\text{-}[Si\text{-}O]_y\text{-}CHR_2\text{-}CH_2\text{-} \\ & | & | \\ C_1\text{-}C_4\text{-}alkyl & C_1\text{-}C_4\text{-}alkyl \\ \end{array}$$

wherein $R_2 = H$; C_1 - C_4 -alkyl and y = 3 to 50;

- sequences based on alkylene oxide adducts of melamine of the type 2-amino-4,6-di-_{C2-C4}-alkylene-amino-1,3,5-triazine sequences:
- phenolic ether sequences based on bivalent phenols and C₂-C₈ diols of the type -_{C2-C8}-alkylene-O-_{C6-C18}-arylene-O-_{C2-C8}-alkylene sequences;

and
$$R_6 = -CH_2-O-C_2-C_{12}$$
-alkylene-O-CH₂-, -CH₂-O-C₆-C₁₄-arylene-O-CH₂-,

and wherein in the partial conversion with diols and/or bisepoxides mixtures can be used which contain up to 70 mass% C₅-C₁₈ alcohols,

are converted into the corresponding substituted triazine derivatives with standing times of 1 to 60 min. with distilling off of C_1 - C_8 alcohols at 60 to 250° C/0.05 to 1 bar wherein through the molar ratio C_1 - C_8 -alkyl-oxa- C_1 - C_8 -alkylene-amino-groups / diol used and/or bisepoxide used of 20 : 1 to 1.1 : 1 a partial re-ethering of the C_1 - C_8 alkyl ether groups of the C_1 - C_8 -alkyl-oxa- C_1 - C_8 -alkylene-amino-triazines is achieved,

in the third step of the process for the further condensation of the amino triazine ether to polytriazine ethers the melt obtained which contains the etherified amino triazine derivatives and proportions of polytriazine ethers and diol which has not been converted / separated off and furthermore can contain C₅-C₁₈ alcohols is dosed into a kneader, converted with a standing time of 2 to 12 min at 140 to 220°C with degassing and the polytriazine ethers are removed and granulated wherein before dosing into the kneader the melt can be exposed to tempering of 20 to 120 min at 70 to 140°C, up to 75 mass% fillers, further reactive polymers of the type ethylene copolymers, maleic acid anhydride copolymers, modified maleic acid anhydride copolymers, poly(meth)acrylates, polyamides, polyesters and/or polyurethanes and up to 2 mass%, respectively in relation to the polytriazine ethers, stabilisers, UV absorbers and/or auxiliary substances can be added to the melt and the melt can be subjected to melt filtration before removal. --